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## GREEK MUSIC FROM THE MODERN POINT OF VIEW<sup>\*</sup>

THE few minutes allotted to me urge the utmost brevity in stating a few facts concerning an obscure subject, with which, perhaps, only a small portion of this audience is thoroughly acquainted. It is impossible, in so short a time, to treat scientifically a topic not generally understood. I must omit numerous quotations from the technical writers collected by Meibom, Wallis, Bellermann, von Ian, and others; I must also refrain from proving and corroborating my statements by other *loci de musica* from the works of Plato, Aristotle, Plutarch, Athenæus, Philodemus, Pollux, Iamblichus, Theo Smyrnæus, Boëthius, Vitruvius, Martianus Capella, and many others, references indispensable to a thorough treatment of the subject. In the case of the Greek music the sounds of the voice and of instruments, vanishing with the breath and the vibration of the strings, have been, for the most part, communicated to posterity only in descriptions of their wondrous effect; only in a few instances have they been preserved by means of musical notation. We may, perhaps, assume that this notation was usually added to lyric poems, but neglected by copyists who failed to comprehend its importance. Did it not happen recently that the musical notation of the Seikilos Epigrammation remained unobserved for eight years, after the stone had been found and its inscription published? Statements about music are by no means scarce, but we lack illustrative compositions.

Numerous indeed are the passages in Greek literature, extolling great musicians and their works, and attaching immortality to their names. Numerous are the passages mentioning or describing the favorite instruments and the impression of their sounds upon the human mind and even upon character, and the passages depicting musical exploits, with an enthusiasm in which the vanished beauty of the sounds themselves seems to reëcho. Indeed, if we consider the beauty of the poetry of the Greeks, the nobility of their sculpture, the majesty of their architecture, are we not entitled to assume that Greek music also was in harmony with the other arts and was similarly great in its simplicity, in spite of its childhood, and in spite of the primitiveness of the musical instruments?

<sup>\*</sup> Paper read at the Classical Conference at Ann Arbor, April 1; see p. 479.

The Greek and Roman writers upon music are unfortunately deficient in illustrative examples. Only the Anonymus II of Bellermann contains a few fragments of exercises for the clarinet examples added to the text.

From a late period, the time of Hadrian, three hymns have been handed down; a hymn to the muse Calliope, by the younger Dionysius of Halicarnassus, one to Helios, probably by the same author, and a hymn to Nemesis by a certain Mesomedes. Furthermore we possess a papyrus fragment with the lines 338–344 of the first *Stasimon* of the Orestes of Euripides. These are the only manuscripts containing musical notes written above the syllables of the text.

Of much greater importance on account of their indisputable genuineness are the fourteen fragments of three hymns to Apollo, inscriptions discovered by the French excavators at Delphi in 1893. These hymns were composed about 280 B. C., after the repulse of the Gauls from Delphi; the first hymn seems especially fit to represent a masterpiece of the musical art during the Alexandrian period.

Finally, a short *nenia*, dedicated by Seikilos to the memory of his wife, was discovered in 1883, near Tralles (in Asia Minor), and proved to contain a few bars of music.

From this scanty material and from the transcription of the Greek notation into modern notation, and the changing of the rhythms into notes of different length (which has been executed with a certain degree of probable correctness), we derive our opinion in regard to post-classical Greek music of the hymnic style. But as yet no trace has been discovered of the *melos* with which the warriors, kindled by a Tyrtæos, strode to battle, no trace of the *melos* of the Encomia, Skolia, Threnoi, the Pæans, of the ancient sacred nomoi—no trace of the melody worthy to follow the words of the choruses of Æschylus; no genuine trace of the melody of a Pindaric ode.

I hasten to enumerate a few points in which ancient Greek music differs essentially from our modern music.

The first difference, a difference in favor of Greek music, consists in the great number of modes, or systems, of scales, formed by the various arrangements of the tones and semitones; we have retained, for our daily use, so to speak, only two, the major and the minor modes. The Greeks possessed about twelve different modes and employed practically at least seven, according to the character of the poem or of the instrumental composition. Some of them have been preserved, with a peculiar shifting of their names, in the so-called church modes.

These Greek modes were formed by establishing a scale from c to c, another from d to d, one from e to e (without accidentals), etc. Like our major and minor, also, the Greek Dorian, Phrygian, Lydian, Mixolydian modes, etc., could be built upon any tone, in any pitch; thus at least  $7 \times 12$ , that is 84 scales resulted, by multiplying the ἀρμονίαι or τρόποι or εἶδη τῶν διαπασῶν by the τόνοι or scales of transposition, bearing similar names.

Those acquainted somewhat with folklore and the literature of modern music will remember, that several of these modes have survived in songs of the Scandinavians, of the Slavonians, of the inhabitants of Bretagne and Normandy, and of the Orientals; and finally in the ritual of the Greek church. Such modes are also employed by Beethoven in the A minor Quartet (Op. 132) in the adagio-movement entitled, "Canzona di ringraziamento offerta alla Divinità da un guarrito;" by Berlioz in his first edition of "The Trojans," where the choruses, vying in the praise of Queen Dido, sing successively in the different Greek modes; by Haendel (in his Israel in Egypt chorus No. 11 and No. 27); by Saint Saëns (in the cantata "les noces de Prométhée"); by Ambroise Thomas (in the fifth act of "Hamlet," La nuit succède au jour, c'est la loi de ce monde); by Raff (Frühlingsboten No. 3); by Gounod and Berlioz (in the Romance of the King of Thule); by R. Wagner in his music dramas, *e. g.*, the Meistersinger (Das Blumenkränzlein von Seidenfein, at the beginning of third act in Tristan, the shepherd's mournful melody), etc. The completion of this list the philologist must leave to the professional musician.

Another difference between ancient Greek and modern music lies in two of the three *genera*; one scale, consisting of tones and semi-tones, was called the diatonic, corresponding with that which we designate by the same term in modern music. It was different with the Greek chromatic genus and the enharmonic genus. To describe these I must remind you of the Greek scale consisting of two tetrachords joined either by one common tone, or disconnected, with an interval of a tone between them. Each tetrachord contained two fixed, and, between these, two movable tones, the interval between the fixed tones amounting to two and one-half tones. The diatonic system employs two and one-half tones; for example, e f g a | b c d e. In the Greek chromatic, a half tone is followed by another half tone, and this group (the πύκνον) is separated from the next tone by an interval of one and one-half, for example :

$$\begin{array}{ccccccc} e & f\sharp & \overbrace{f} & a & | & b & c\sharp & c & e \\ \underbrace{\frac{1}{2}} & \underbrace{\frac{1}{2}} & \underbrace{\frac{1}{2}} & & & \underbrace{\frac{1}{2}} & \underbrace{\frac{1}{2}} & \underbrace{\frac{1}{2}} & \end{array}$$

In the enharmonic the half tone is divided into two parts; the group becomes still more compact and its distance from the fourth tone of the tetrachord still larger; here we have to deal with the interval of about a fourth of a tone, the so-called *diécoris*, thus,

$$\begin{array}{ccccccc} e & \bar{e} & f & a & | & b & \bar{b} & c & e \\ \underbrace{\frac{1}{2}} & \underbrace{\frac{1}{2}} & \underbrace{\frac{1}{2}} & 2 & & \underbrace{\frac{1}{2}} & \underbrace{\frac{1}{2}} & \underbrace{\frac{1}{2}} & 2 \end{array}$$

Chromatic elements can be found frequently in modern compositions, especially in Chopin and Wagner, although the system scarcely ever has been employed throughout; it is, however, noteworthy that Frescobaldi (in his *Fiori musicali*, 1635) treats a chromatic fugue constructed upon the tones  $e\ f\sharp\ f\ a\ \flat b\ b^{nat}$ . The enharmonic system has disappeared in later compositions; it was considered by ancient musical authorities as the finest, noblest and most difficult system, but seems to have flourished during a comparatively short period.

Furthermore, the Greeks employed several *chroai*, "shadings," nuances, in the diatonic and chromatic system; in the diatonic, the *malakon*; in the chromatic, the *hemiolion* and the *malakon*. In these again the quarter tones, the *dieseis*, occur. Thus the modes in different pitch, with the three genera and several "shadings" produce a variety of scales, difficult to conceive and undoubtedly almost incomprehensible to the modern ear. The Greek *melos* was thus enabled to move by steps unfamiliar to the modern composer, unknown to the modern audience.

The much disputed question whether the ancient Greeks were acquainted with harmony and employed it (harmony, that is, the simultaneous sounding of different tones forming chords), has, after vehement discussion during three centuries, been answered thus: Men, women, and children sang in unison, or in octaves; the instrumental accompaniment followed in the earliest time the melody, in later periods the instruments must have produced an accompaniment in different tones (Krusis) of a primitive character; and in this accompaniment we may search after the rudiments of harmony. The question as to how far the ancients considered the interval of the third a consonance cannot be discussed here. The accompaniment was placed higher than the voice, undoubtedly in the case of the flute, probably in the case of the lyre.

The fact that the accompaniment was not forced to follow the melody in tones of equal duration, may be considered as a direct assertion of the existence of polyphony. Polyphony must have been employed also when two or more instruments were played together; and since Ptolemaeus rejected the monochord as a practical musical instrument for the reason that it could be played with one hand only, we are entitled to the opinion, that on harps, lyres, and similar string instruments, chords were produced. But polyphony of the voices of singers is nowhere mentioned. The solemn but thin Greek music, lacked that most powerful element, harmony, by which modern composers try but too frequently to replace, or to cover the sterility of their imagination in inventing melodies.

The Greeks not only enjoyed a rich variety of scales; they employed also a well-known, but rarely felt, variety of rhythms. Their melodies were strictly bound to follow the flow of the rhythm of the verses, to follow the ἀναξίφορμιγγες ὕμνοι, probably also the emphasis of certain words and passages, and even the accents of the syllables of a word. Since in lyric poems, and especially in the chorus of the drama, the rhythms frequently changed, the time in a Greek musical composition was accordingly often changed—a rather rare occurrence in modern music; yet many chorales of the sixteenth and seventeenth centuries, passages in Clementis, 7th and 8th sonatas, and in Wagner's dramas show similar alteration, as for instance, a passage in  $\frac{3}{4}$  time interrupted by a few bars in  $\frac{3}{8}$  time. Some rhythms, as the Cretic, Zacchic, and Dochmiac, are foreign to modern music, yet such occur also in the works of Wagner, Chopin, Tschaikowsky, Rimsky-Korsakow, Berlioz, and others.

At the celebration of a festival, at the performance of a drama with music, we should miss our modern orchestra, that wonderful palette of tone-colors, composed of the string quintette (the Greeks had no violins), of the several kinds of trumpets and horns (trumpets were used by the Greeks only in battle), of the wood-winds (the oboe, clarinet and piccolo alone seem to have been found among the Greeks), and of the instruments of percussion.

The multitude of our musical instruments was reduced to a few kinds of harps with surprisingly short strings, and to the clarinets, or oboe, known as αὐλοί. These primitive instruments accompanied with great simplicity the unison songs, the standard songs of the chorus or soloist, the nomi, or sounded alone in the "*psile kitharisis*" and "*psile aulesis*."

We should miss also the queen of our musical instruments, the organ ; for the hydraulic organ described by Vitruvius, Athenæus and others of course cannot be compared with it ; some would miss the hammer tones of that modern music-machine which, as I hope, will become with future generations, the object of pity or mockery, the piano.

But lovers of the modern symphonic poem probably would find some satisfaction, provided that they could content themselves with the sounds of a flute ; they would find the prototype of the symphonic poem in the Pythian nomos of Olympus. With the analysis given by Pollux and with a certain amount of phantasy, which enthusiasts rarely lack, they could decipher from the tones of the five movements of that celebrated nomos, how Apollo appears, surveys the battlefield, challenges the monster Pytho, and, as we may expect in this and similar cases with great certainty, slays the dragon ; the disciple of the Liszt-Wagner-Berlioz school could even enjoy the gnashing of the teeth, τὸν ὀδοντισμὸν ὡς τοῦ δράκοντος ἐν τῷ τοξεύεσθαι συμπρίοντος τοὺς ὀδόντας.

And finally he might participate in the triumph of the victorious god.

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